

Mineralogy, geochemistry and SEM micrographs study of Clinker and Portland cement of Orumiyeh cement factory, West Azerbaijan, NW Iran.

Zahra Ahmadi*

Department of Earth Sciences, Faculty of Natural Sciences, University of Tabriz, Tabriz, Iran.

(Received: 5/3/2017, in revised form: 25/6/2017)

Abstract : In this research, mineralogy, geochemistry and SEM micrographs of clinker and Portland cement of Orumiyeh Cement factory were studied by Clinkers Polished sections and SEM micrographs as well as chemical analysis of clinker and Portland cements were done by XRF method in the Orumiyeh cement factory chemical lab and bogue chemical indices were calculated. Also, lime saturation factor, silica and alumina ratios were also used to compare the Orumiyeh cements and clinker by universal standards. The results show the presence of alite, belite, quartz and aluminite phases in polished sections, the necessary fuel is a type of gas fields, the rate of increasing the temperature in the kiln is very much, the rate of cooling is weak and burning the clinker has been performed during a long time. Also the Orumiyeh clinker and Portland cement type 2 have significant conformation to clinker and cement universal standards.

Keywords: *Mineralogy; geochemistry; SEM; clinker; Portland cement; Orumiyeh.*

متن فارسی اصل مقاله از صفحه ۱۰۳ تا ۱۱۴ در این شماره به چاپ رسیده است.

*Corresponding author, Tel: 09171961328, Email: zahraahmadipetrology94@gmail.com